

## **Effects of aging on human leukocytes (part II): Immunophenotyping of adaptive immune B and T cell subsets**

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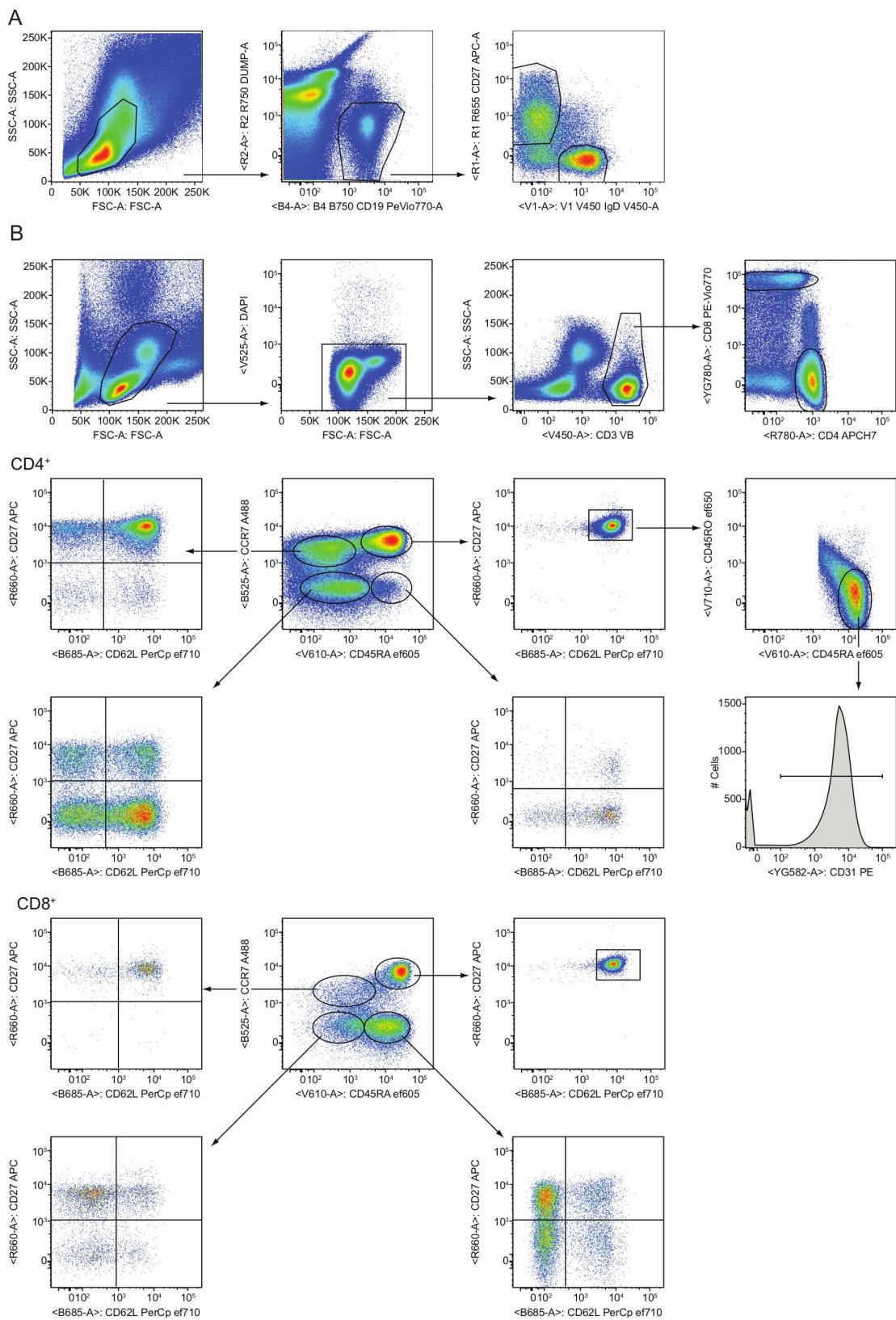
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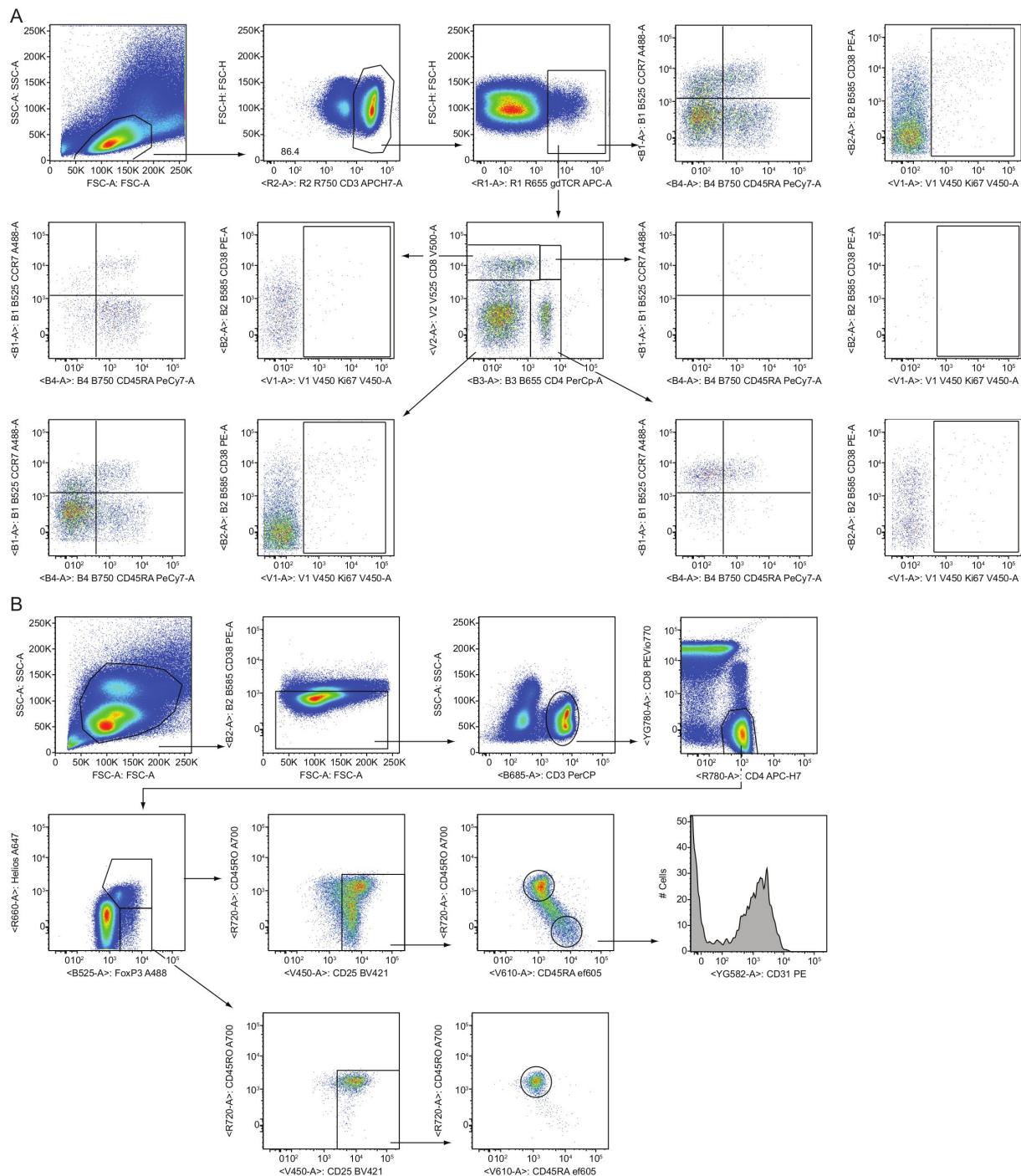
Fax: +49 (0)30 450 539 955

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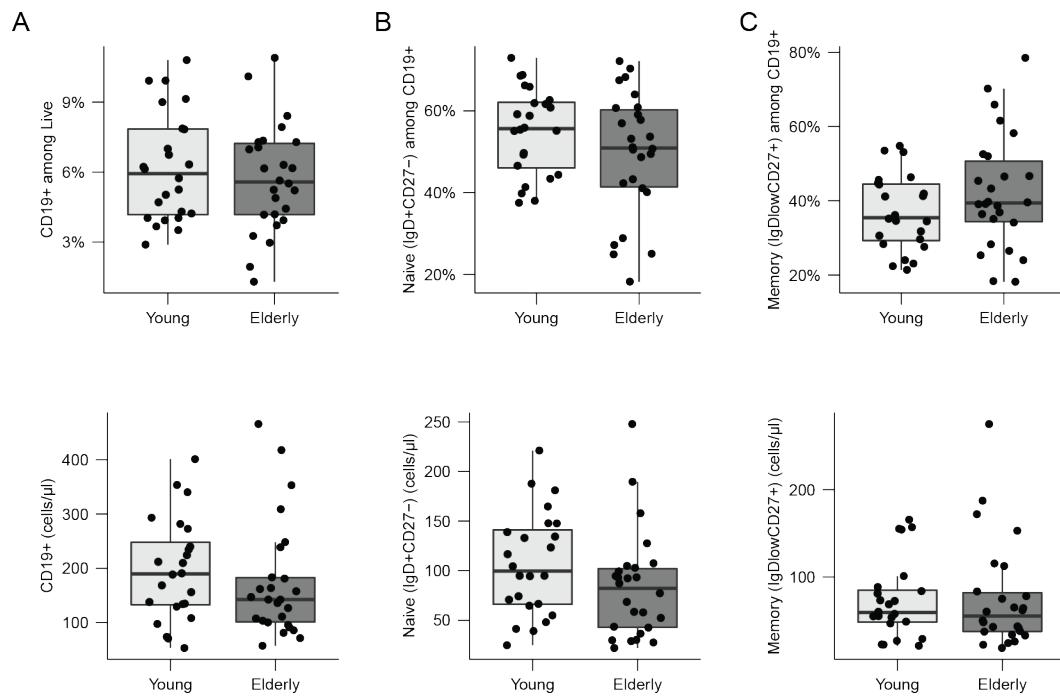
### Supplementary Fig. 1: B and T cell gating strategy.

Gating strategies for analysis of A) B cells and B) CD4<sup>+</sup> and CD8<sup>+</sup> T cells. Not shown is the doublet exclusion on FCS-W vs. FCS-H followed by SSC-W vs. SSC-H and a time gate after the lymphocyte gate. Presented is a representative donor.



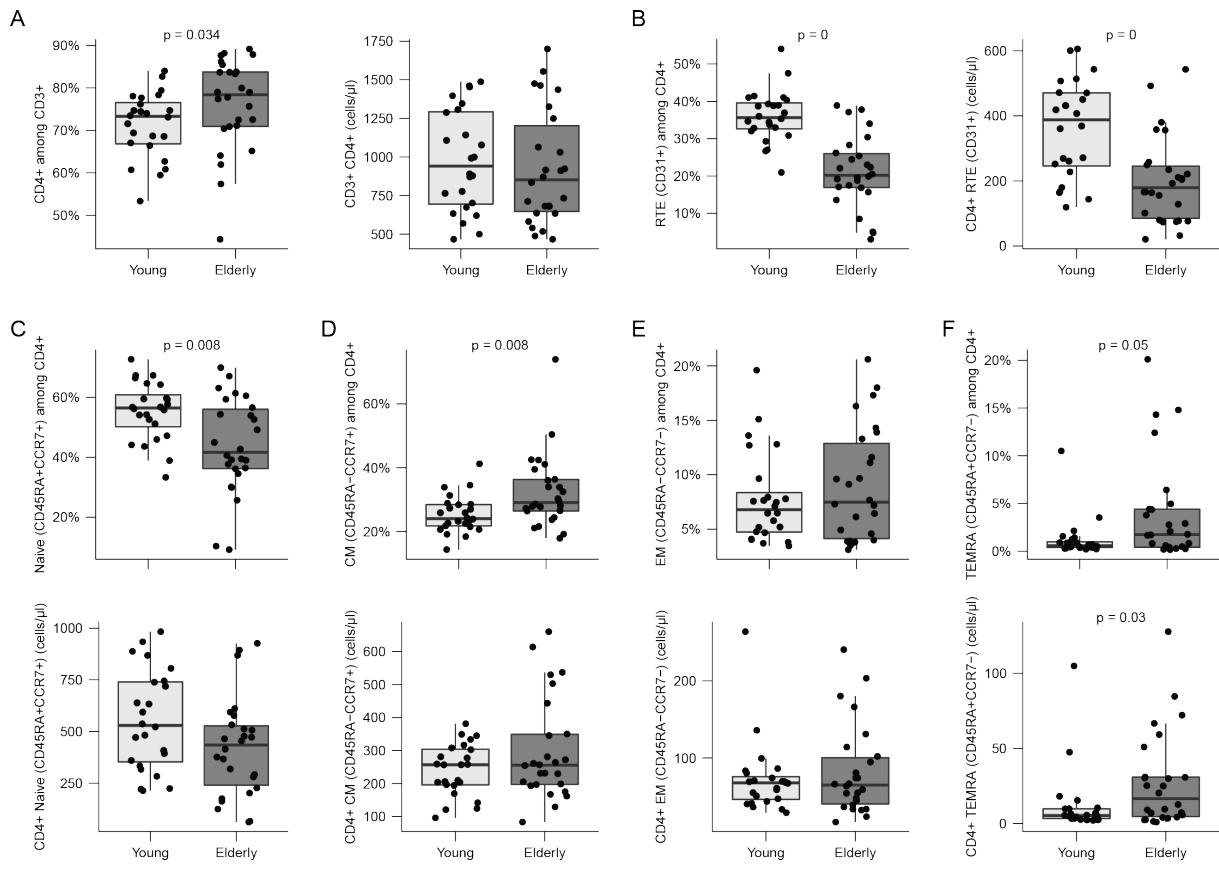
### Supplementary Fig. 2: $\gamma\delta$ TCR and Treg gating strategy.

Gating strategies for analysis of A)  $\gamma\delta$ TCR<sup>+</sup> T cells and B) Tregs. Not shown is the doublet exclusion on FCS-W vs. FCS-H followed by SSC-W vs. SSC-H and a time gate after the lymphocyte gate. Presented is a representative donor.



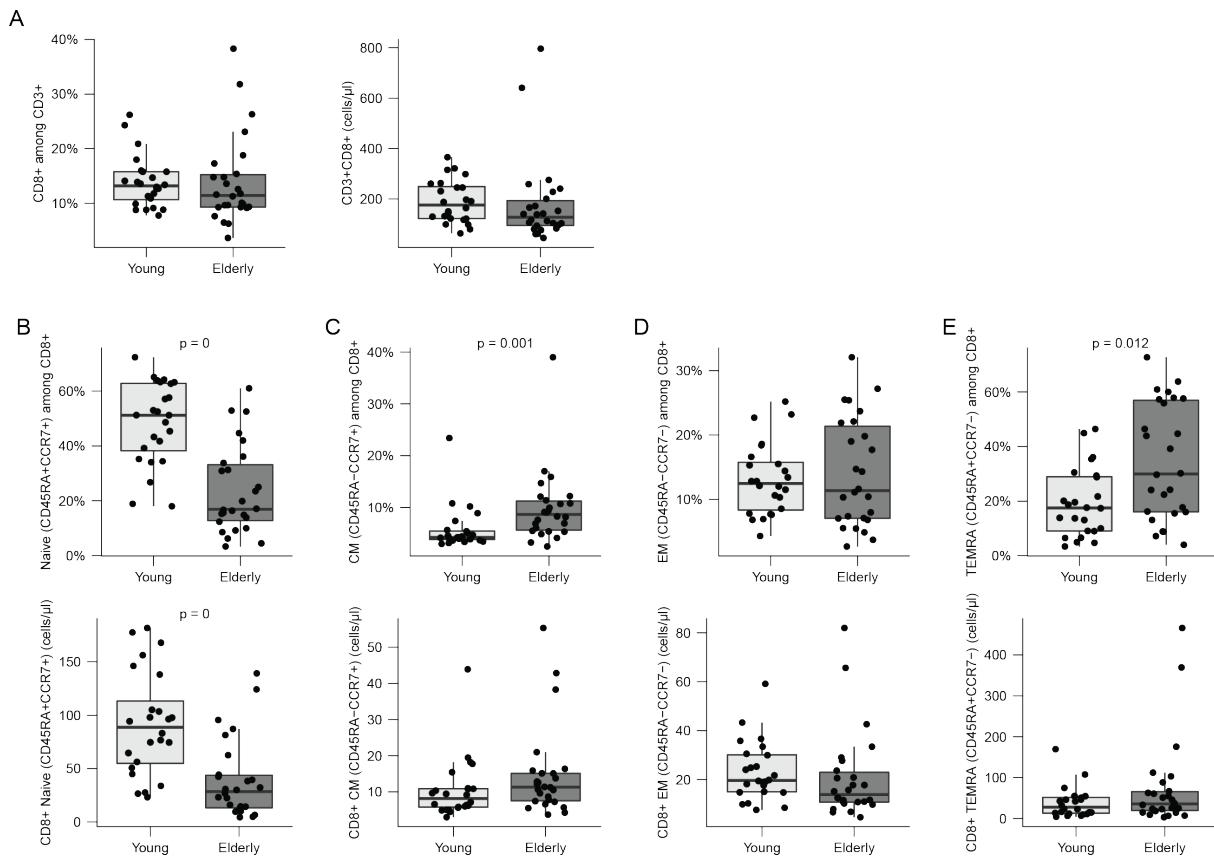
**Supplementary Fig. 3: B cells are unaltered at early age.**

Shown are individual measurements and boxplots of indicated populations and total cell number/ $\mu$ l whole blood for A) CD19 $^{+}$  B cells among all live lymphocytes, B) Naive B cells, as defined by IgD $^{+}$ CD27 $^{-}$ , among CD19 $^{+}$  B cells, C) Memory B cells, as defined by IgD $^{\text{Low}}$ CD27 $^{+}$ , among CD19 $^{+}$  B cells. The box indicates the 25<sup>th</sup>, 50<sup>th</sup>, and 75<sup>th</sup> percentiles, the whiskers the minimum and maximum values excluding outliers. Gating was performed as described in Supplementary Fig. 1A. Difference tested by Wilcoxon rank-sum test and only p-values < 0.05 are reported.



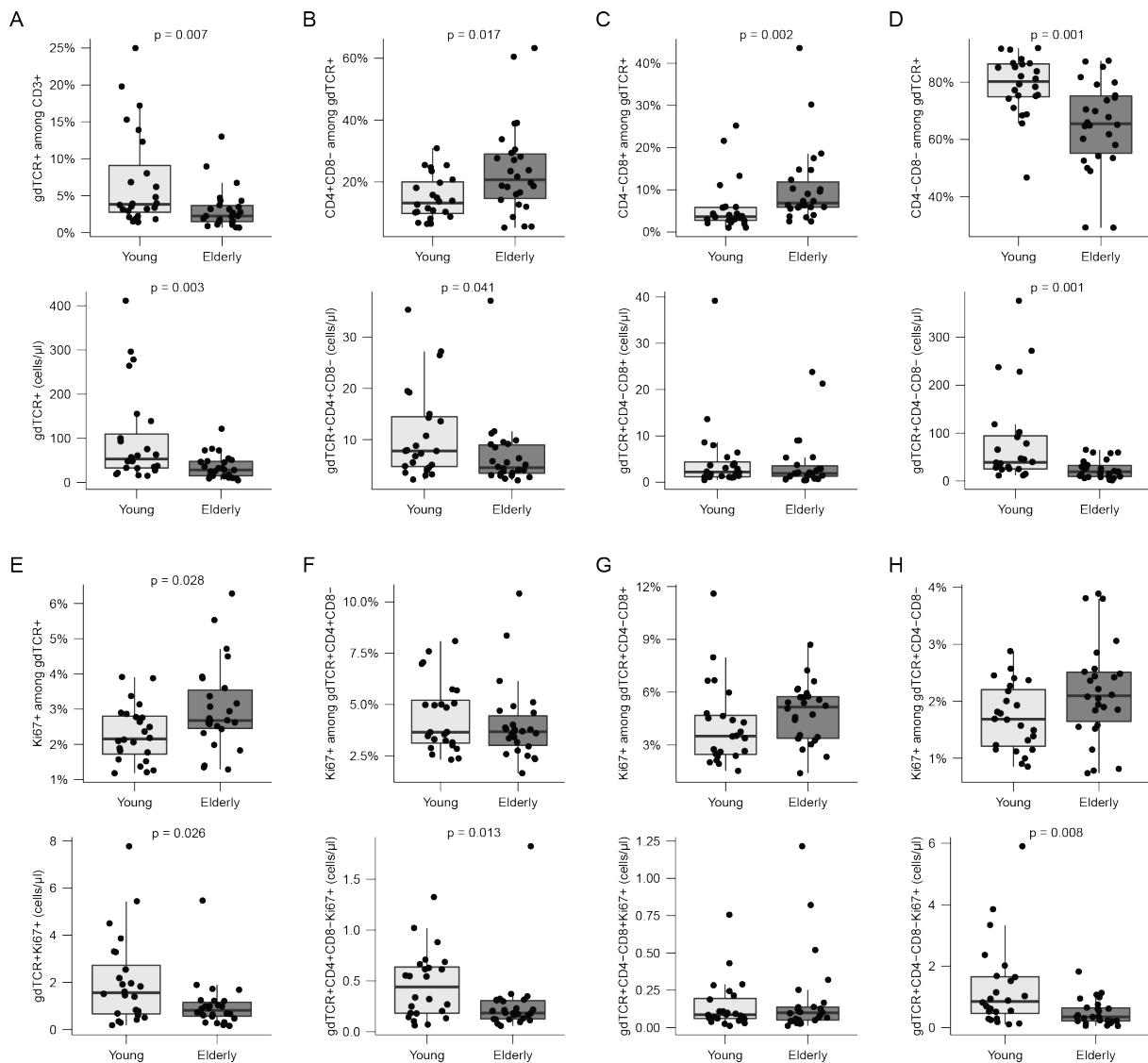
### Supplementary Fig. 4: Naive and memory subset of CD4<sup>+</sup> T cells.

Shown are individual measurements and boxplots of indicated populations and total cell number/ $\mu$ l whole blood for A) CD4<sup>+</sup> among CD3<sup>+</sup>, B) recent thymic emigrants (CD31<sup>+</sup>) among CD4<sup>+</sup>, C) Naive cells (CD45RA<sup>+</sup>CCR7<sup>+</sup>) among CD4<sup>+</sup>, D) central memory cells (CD45RA<sup>-</sup>CCR7<sup>+</sup>) among CD4<sup>+</sup>, E) effector memory cells (CD45RA<sup>-</sup>CCR7<sup>-</sup>) among CD4<sup>+</sup>, F) terminally differentiated T (CD45RA<sup>+</sup>CCR7<sup>-</sup>) among CD4<sup>+</sup>. The box indicates the 25<sup>th</sup>, 50<sup>th</sup>, and 75<sup>th</sup> percentiles, the whiskers the minimum and maximum values excluding outliers. Gating was performed as described in Supplementary Fig. 1B. Difference tested by Wilcoxon rank-sum test and only p-values < 0.05 are reported.



**Supplementary Fig. 5: Naive and memory subset of CD8<sup>+</sup> T cells.**

Shown are individual measurements and boxplots of indicated populations and total cell number/μl whole blood for A) CD8<sup>+</sup> among CD3<sup>+</sup>, B) Naive cells (CD45RA<sup>+</sup>CCR7<sup>+</sup>) among CD8<sup>+</sup>, C) central memory cells (CD45RA<sup>-</sup>CCR7<sup>+</sup>) among CD8<sup>+</sup>, D) effector memory cells (CD45RA<sup>-</sup>CCR7<sup>-</sup>) among CD8<sup>+</sup>, E) terminally differentiated T (CD45RA<sup>+</sup>CCR7<sup>-</sup>) among CD4<sup>+</sup>. The box indicates the 25<sup>th</sup>, 50<sup>th</sup>, and 75<sup>th</sup> percentiles, the whiskers the minimum and maximum values excluding outliers. Gating was performed as described in Supplementary Fig. 1B. Difference tested by Wilcoxon rank-sum test and only p-values < 0.05 are reported.



**Supplementary Fig. 6: Effect of ageing on  $\gamma\delta$ TCR positive T cells.**

Shown are individual measurements and boxplots of indicated populations and total cell number/ $\mu$ l whole blood for A)  $\gamma\delta$ TCR+ among CD3+, B) CD4+ among  $\gamma\delta$ TCR+, C) CD8+ among  $\gamma\delta$ TCR+, D) CD4-CD8- among  $\gamma\delta$ TCR+. The result of Ki67-staining is shown for E) Ki67+ among  $\gamma\delta$ TCR+, F) Ki67+ among  $\gamma\delta$ TCR+CD4+, G) Ki67+ among  $\gamma\delta$ TCR+CD8+, H) Ki67+ among  $\gamma\delta$ TCR+CD4-CD8-. The box indicates the 25th, 50th, and 75th percentiles, the whiskers the minimum and maximum values excluding outliers. Gating was performed as described in Supplementary Fig. 2A. Difference tested by Wilcoxon rank-sum test and only p-values < 0.05 are reported.

Supplementary Table 1

Age and gender distribution of donors in each staining panel of the study.

<b>Staining panel</b>	<b>B cells</b>	<b>CD3</b>	<b>CD4 T cells</b>	<b>CD8 T cells</b>	<b>γδTCR+ cells</b>
Total number of donors	50	50	50	50	50
Age range young	19-30	19-30	19-30	19-30	19-30
Age range elderly	53-67	53-67	53-67	53-67	53-67
Number young	24	24	24	24	24
Number young Female/Male	12/12	12/12	12/12	12/12	12/12
Number elderly	26	26	26	26	26
Number elderly Female/Male	16/10	16/10	16/10	16/10	16/10

## Supplementary Table 2

Mean, standard deviation, and p-values of cell fractions of all reported cell populations and comparisons.

Population	Percent (Mean ± SD)		Wilcoxon signed-rank test p-value
	Young	Elderly	
<b>B cells</b>			
CD19+ among Live	6.2 ± 2.3	5.7 ± 2.3	0.655
Naive (IgD+CD27-) among CD19+	55 ± 11	49 ± 15	0.244
Memory (IgDlowCD27+) among CD19+	37 ± 10	42 ± 15	0.221
<b>CD3</b>			
CD3+ among Live	60 ± 7.4	56 ± 11	0.171
<b>CD4+ T cells</b>			
CD4+ among CD3+	71 ± 7.7	76 ± 11	3.43e-02
RTE (CD31+) among CD4	36 ± 6.9	21 ± 9.7	1.78e-06
EM (CD45RA-CCR7-) among CD4	7.8 ± 4.2	9 ± 5.2	0.607
CD62L-CD27- among CD4+ EM (CD45RA-CCR7-)	19 ± 7.5	34 ± 16	1.14e-03
CD62L-CD27+ among CD4+ EM (CD45RA-CCR7-)	36 ± 8.5	26 ± 11	8.66e-04
CD62L+CD27- among CD4+ EM (CD45RA-CCR7-)	13 ± 8.8	15 ± 9.2	0.29
CD62L+CD27+ among CD4+ EM (CD45RA-CCR7-)	32 ± 6.9	26 ± 11	9.8e-03
CM (CD45RA-CCR7+) among CD4	25 ± 5.9	32 ± 12	8.5e-03
CD62L-CD27- among CD4+ CM (CD45RA-CCR7+)	2 ± 0.88	2.3 ± 1	0.272
CD62L-CD27+ among CD4+ CM (CD45RA-CCR7+)	15 ± 3.8	16 ± 5.6	0.854
CD62L+CD27- among CD4+ CM (CD45RA-CCR7+)	2.2 ± 1.2	2.2 ± 0.95	0.734
CD62L+CD27+ among CD4+ CM (CD45RA-CCR7+)	81 ± 4	79 ± 6.5	0.554
TEMRA (CD45RA+CCR7-) among CD4	1.2 ± 2.1	4 ± 5.4	4.98e-02
CD62L-CD27- among CD4+ TEMRA (CD45RA+CCR7-)	21 ± 15	45 ± 28	1.07e-03
CD62L-CD27+ among CD4+ TEMRA (CD45RA+CCR7-)	22 ± 12	12 ± 13	4.05e-03
CD62L+CD27- among CD4+ TEMRA (CD45RA+CCR7-)	21 ± 18	29 ± 21	0.177
CD62L+CD27+ among CD4+ TEMRA (CD45RA+CCR7-)	6.8 ± 3.9	7.8 ± 4.8	0.734
Naive (CD45RA+CCR7+) among CD4	55 ± 9.7	44 ± 16	8.03e-03
CD62L+CD27+ among CD4+ Naive (CD45RA+CCR7+)	100 ± 0.22	99 ± 0.81	0.158
<b>CD4+ Tregs</b>			
Foxp3+Helios- among CD4+	0.48 ± 0.27	0.59 ± 0.24	0.0623
CD25+ among Foxp3+Helios-	80 ± 9.4	87 ± 5.7	2.43e-02
Foxp3+Helios- RTE (CD31+) among CD4+	0.088 ± 0.094	0.076 ± 0.055	0.892
Foxp3+Helios- Memory (CD45RA-CD45RO+) among CD4+	0.28 ± 0.17	0.43 ± 0.19	2.15e-03
Foxp3+Helios- Naive (CD45RA+CD45RO-) among CD4+	0.053 ± 0.071	0.022 ± 0.024	2.43e-02

Foxp3+Helios+ among CD4+	$5.7 \pm 1.5$	$5.5 \pm 2.5$	0.377
CD25+ among Foxp3+Helios+	$87 \pm 4.3$	$87 \pm 4.2$	0.846
Foxp3+Helios+ RTE (CD31+) among CD4+	$1.7 \pm 0.62$	$0.92 \pm 0.42$	1.33e-06
Foxp3+Helios+ Memory (CD45RA-CD45RO+) among CD4+	$2.2 \pm 0.59$	$3 \pm 1.4$	2.31e-02
Foxp3+Helios+ Naive (CD45RA+CD45RO-) among CD4+	$1.6 \pm 0.78$	$0.63 \pm 0.5$	2.98e-05
<b>CD8+ T cells</b>			
CD8+ among CD3+	$14 \pm 4.7$	$14 \pm 8.1$	0.455
EM (CD45RA-CCR7-) among CD8+	$13 \pm 5.5$	$14 \pm 8.5$	0.915
CD62L-CD27- among CD8+ EM (CD45RA-CCR7-)	$15 \pm 10$	$22 \pm 14$	3.35e-02
CD62L-CD27+ among CD8+ EM (CD45RA-CCR7-)	$58 \pm 13$	$53 \pm 14$	0.24
CD62L+CD27- among CD8+ EM (CD45RA-CCR7-)	$3.9 \pm 3.2$	$5 \pm 6.1$	0.801
CD62L+CD27+ among CD8+ EM (CD45RA-CCR7-)	$23 \pm 9$	$20 \pm 11$	0.101
CM (CD45RA-CCR7+) among CD8+	$5.8 \pm 4.3$	$9.8 \pm 7$	7.03e-04
CD62L-CD27- among CD8+ CM (CD45RA-CCR7+)	$0.6 \pm 0.47$	$0.83 \pm 0.88$	0.214
CD62L-CD27+ among CD8+ CM (CD45RA-CCR7+)	$22 \pm 8.6$	$24 \pm 9.1$	0.327
CD62L+CD27- among CD8+ CM (CD45RA-CCR7+)	$1.1 \pm 1.2$	$2.1 \pm 1.8$	1.22e-02
CD62L+CD27+ among CD8+ CM (CD45RA-CCR7+)	$77 \pm 8.5$	$73 \pm 9.2$	0.12
TEMRA (CD45RA+CCR7-) among CD8+	$19 \pm 13$	$35 \pm 21$	1.22e-02
CD62L-CD27- among CD8+ TEMRA (CD45RA+CCR7-)	$28 \pm 13$	$52 \pm 22$	1.36e-04
CD62L-CD27+ among CD8+ TEMRA (CD45RA+CCR7-)	$27 \pm 11$	$22 \pm 16$	0.113
CD62L+CD27- among CD8+ TEMRA (CD45RA+CCR7-)	$15 \pm 12$	$13 \pm 12$	0.443
CD62L+CD27+ among CD8+ TEMRA (CD45RA+CCR7-)	$30 \pm 14$	$13 \pm 11$	3.84e-05
Naive (CD45RA+CCR7+) among CD8+	$48 \pm 15$	$24 \pm 16$	8.32e-06
CD62L+CD27+ among CD8+ Naive (CD45RA+CCR7+)	$99 \pm 0.36$	$98 \pm 3$	0.0881
<b><math>\gamma\delta</math>T cells</b>			
$\gamma\delta$ TCRa among CD3+	$7 \pm 6.6$	$3.1 \pm 2.8$	6.56e-03
CD4-CD8- among $\gamma\delta$ TCR+	$79 \pm 10$	$65 \pm 15$	5.88e-04
EM (CD45RA-CCR7-) among CD4-CD8-	$44 \pm 23$	$44 \pm 23$	0.961
CM (CD45RA-CCR7+) among CD4-CD8-	$4.7 \pm 2.5$	$9.8 \pm 9.7$	2.19e-02
TEMRA (CD45RA+CCR7-) among CD4-CD8-	$43 \pm 20$	$40 \pm 24$	0.426
Naive (CD45RA+CCR7+) among CD4-CD8-	$7.9 \pm 8$	$6.1 \pm 5.5$	0.547
Ki67+ among CD4-CD8-	$1.7 \pm 0.58$	$2.2 \pm 0.86$	0.051
CD4-CD8+ among $\gamma\delta$ TCR+	$5.9 \pm 6.1$	$10 \pm 9.1$	1.89e-03
EM (CD45RA-CCR7-) among CD4-CD8+	$21 \pm 11$	$21 \pm 11$	0.877
CM (CD45RA-CCR7+) among CD4-CD8+	$5.5 \pm 3.3$	$6.9 \pm 4.1$	0.248
TEMRA (CD45RA+CCR7-) among CD4-CD8+	$48 \pm 21$	$58 \pm 22$	0.168
Naive (CD45RA+CCR7+) among CD4-CD8+	$26 \pm 15$	$15 \pm 10$	9.53e-03

Ki67+ among CD4-CD8+	$4.1 \pm 2.3$	$4.8 \pm 1.7$	0.074
CD4+CD8- among $\gamma\delta$ TCR+	$15 \pm 7.2$	$24 \pm 15$	1.69e-02
EM (CD45RA-CCR7-) among CD4+CD8-	$16 \pm 6.3$	$16 \pm 7.6$	0.786
CM (CD45RA-CCR7+) among CD4+CD8-	$45 \pm 6.7$	$47 \pm 12$	0.749
TEMRA (CD45RA+CCR7-) among CD4+CD8-	$2.5 \pm 2.1$	$6.5 \pm 6.6$	3.06e-03
Naive (CD45RA+CCR7+) among CD4+CD8-	$37 \pm 8.8$	$30 \pm 12$	2.03e-02
Ki67+ among CD4+CD8-	$4.4 \pm 1.7$	$4 \pm 1.9$	0.528
CD4+CD8+ among $\gamma\delta$ TCR+	$0.12 \pm 0.24$	$0.21 \pm 0.4$	0.101
EM (CD45RA-CCR7-) among CD4+CD8+	$9.1 \pm 11$	$12 \pm 18$	0.968
CM (CD45RA-CCR7+) among CD4+CD8+	$28 \pm 23$	$27 \pm 21$	0.969
TEMRA (CD45RA+CCR7-) among CD4+CD8+	$7.4 \pm 8.6$	$17 \pm 23$	0.155
Naive (CD45RA+CCR7+) among CD4+CD8+	$56 \pm 28$	$40 \pm 25$	3.18e-02
Ki67+ among CD4+CD8+	$16 \pm 22$	$11 \pm 14$	0.358
EM (CD45RA-CCR7-) among $\gamma\delta$ TCR+	$43 \pm 17$	$37 \pm 16$	0.177
CM (CD45RA-CCR7+) among $\gamma\delta$ TCR+	$11 \pm 4.8$	$18 \pm 12$	6.18e-03
TEMRA (CD45RA+CCR7-) among $\gamma\delta$ TCR+	$34 \pm 16$	$34 \pm 23$	0.472
Naive (CD45RA+CCR7+) among $\gamma\delta$ TCR+	$12 \pm 7.3$	$11 \pm 6.9$	0.846
Ki67+ among $\gamma\delta$ TCR+	$2.3 \pm 0.8$	$3 \pm 1.2$	2.82e-02

### Supplementary Table 3

Mean, standard deviation, and p-values of cell counts of all reported cell populations and comparisons.

Population	Cells/ $\mu$ l (Mean $\pm$ SD)		Wilcoxon signed-rank test p-value
	Young	Elderly	
<b>B cells</b>			
CD19+ among Live	196 $\pm$ 94	172 $\pm$ 107	0.229
Naive (IgD+CD27-) among CD19+	107 $\pm$ 52	84 $\pm$ 53	0.0709
Memory (IgDlowCD27+) among CD19+	73 $\pm$ 44	75 $\pm$ 61	0.641
<b>CD3</b>			
CD3+ among Live	1370 $\pm$ 440	1226 $\pm$ 481	0.286
<b>CD4+ T cells</b>			
CD4+ among CD3+	975 $\pm$ 328	927 $\pm$ 370	0.587
RTE (CD31+) among CD4	360 $\pm$ 149	201 $\pm$ 134	3.28e-04
EM (CD45RA-CCR7-) among CD4	72 $\pm$ 47	82 $\pm$ 58	0.954
CD62L-CD27- among CD4+ EM (CD45RA-CCR7-)	16 $\pm$ 16	32 $\pm$ 36	0.0623
CD62L-CD27+ among CD4+ EM (CD45RA-CCR7-)	23 $\pm$ 7.3	20 $\pm$ 18	2.43e-02
CD62L+CD27- among CD4+ EM (CD45RA-CCR7-)	13 $\pm$ 24	12 $\pm$ 12	0.415
CD62L+CD27+ among CD4+ EM (CD45RA-CCR7-)	21 $\pm$ 6.7	17 $\pm$ 8.7	6.95e-03
CM (CD45RA-CCR7+) among CD4	241 $\pm$ 79	299 $\pm$ 154	0.461
CD62L-CD27- among CD4+ CM (CD45RA-CCR7+)	4.8 $\pm$ 3.2	7.8 $\pm$ 7.2	0.214
CD62L-CD27+ among CD4+ CM (CD45RA-CCR7+)	36 $\pm$ 15	52 $\pm$ 42	0.56
CD62L+CD27- among CD4+ CM (CD45RA-CCR7+)	5.7 $\pm$ 4.6	6.7 $\pm$ 5	0.372
CD62L+CD27+ among CD4+ CM (CD45RA-CCR7+)	195 $\pm$ 64	232 $\pm$ 108	0.361
TEMRA (CD45RA+CCR7-) among CD4	12 $\pm$ 22	28 $\pm$ 32	2.96e-02
CD62L-CD27- among CD4+ TEMRA (CD45RA+CCR7-)	3.6 $\pm$ 10	15 $\pm$ 18	4.58e-03
CD62L-CD27+ among CD4+ TEMRA (CD45RA+CCR7-)	1.2 $\pm$ 0.56	1 $\pm$ 1.1	1.29e-02
CD62L+CD27- among CD4+ TEMRA (CD45RA+CCR7-)	4.7 $\pm$ 11	10 $\pm$ 17	4.98e-02
CD62L+CD27+ among CD4+ TEMRA (CD45RA+CCR7-)	1.3 $\pm$ 3.3	3.1 $\pm$ 4.9	0.111
Naive (CD45RA+CCR7+) among CD4	555 $\pm$ 240	422 $\pm$ 238	0.0623
CD62L+CD27+ among CD4+ Naive (CD45RA+CCR7++)	553 $\pm$ 239	419 $\pm$ 237	0.0596
<b>CD4+ Tregs</b>			
Foxp3+Helios- among CD4+	3.9 $\pm$ 2.7	4.9 $\pm$ 2.9	0.068
CD25+ among Foxp3+Helios-	3.2 $\pm$ 2.5	4.2 $\pm$ 2.5	2.96e-02
Foxp3+Helios- RTE (CD31+) among CD4+	0.73 $\pm$ 0.94	0.6 $\pm$ 0.4	0.861
Foxp3+Helios- Memory (CD45RA-CD45RO+) among CD4+	2.3 $\pm$ 1.7	3.6 $\pm$ 2.1	5.83e-03
Foxp3+Helios- Naive (CD45RA+CD45RO-) among CD4+	0.43 $\pm$ 0.68	0.18 $\pm$ 0.21	3.96e-02
Foxp3+Helios+ among CD4+	46 $\pm$ 18	46 $\pm$ 35	0.286

CD25+ among Foxp3+Helios+	$40 \pm 16$	$40 \pm 32$	0.268
Foxp3+Helios+ RTE (CD31+) among CD4+	$14 \pm 7.1$	$7.5 \pm 4.1$	3.8e-04
Foxp3+Helios+ Memory (CD45RA-CD45RO+) among CD4+	$17 \pm 6.6$	$25 \pm 19$	0.125
Foxp3+Helios+ Naive (CD45RA+CD45RO-) among CD4+	$13 \pm 8$	$5.6 \pm 5.6$	3.28e-04
<b>CD8+ T cells</b>			
CD8+ among CD3+	$189 \pm 85$	$180 \pm 172$	0.0839
EM (CD45RA-CCR7-) among CD8+	$23 \pm 12$	$21 \pm 18$	0.0988
CD62L-CD27- among CD8+ EM (CD45RA-CCR7-)	$3.5 \pm 2.7$	$4.5 \pm 5.1$	0.727
CD62L-CD27+ among CD8+ EM (CD45RA-CCR7-)	$13 \pm 7.6$	$11 \pm 12$	4.76e-02
CD62L+CD27- among CD8+ EM (CD45RA-CCR7-)	$0.89 \pm 0.76$	$0.84 \pm 0.96$	0.286
CD62L+CD27+ among CD8+ EM (CD45RA-CCR7-)	$5.4 \pm 3.6$	$3.9 \pm 4$	1.88e-02
CM (CD45RA-CCR7+) among CD8+	$10 \pm 8.5$	$15 \pm 12$	0.0772
CD62L-CD27- among CD8+ CM (CD45RA-CCR7+)	$0.057 \pm 0.049$	$0.12 \pm 0.17$	0.068
CD62L-CD27+ among CD8+ CM (CD45RA-CCR7+)	$2 \pm 1.2$	$3.3 \pm 2.8$	2.96e-02
CD62L+CD27- among CD8+ CM (CD45RA-CCR7+)	$0.15 \pm 0.33$	$0.33 \pm 0.44$	4.05e-03
CD62L+CD27+ among CD8+ CM (CD45RA-CCR7+)	$8.3 \pm 7.6$	$11 \pm 9.5$	0.221
TEMRA (CD45RA+CCR7-) among CD8+	$39 \pm 38$	$74 \pm 109$	0.236
CD62L-CD27- among CD8+ TEMRA (CD45RA+CCR7-)	$12 \pm 13$	$52 \pm 96$	1.88e-02
CD62L-CD27+ among CD8+ TEMRA (CD45RA+CCR7-)	$9.1 \pm 9.3$	$9.5 \pm 9.6$	0.846
CD62L+CD27- among CD8+ TEMRA (CD45RA+CCR7-)	$7.8 \pm 12$	$7.9 \pm 11$	0.741
CD62L+CD27+ among CD8+ TEMRA (CD45RA+CCR7-)	$10 \pm 10$	$4.7 \pm 5.3$	2.3e-03
Naive (CD45RA+CCR7+) among CD8+	$92 \pm 49$	$39 \pm 37$	7.45e-05
CD62L+CD27+ among CD8+ Naive (CD45RA+CCR7+)	$91 \pm 48$	$39 \pm 37$	7.45e-05
<b><math>\gamma\delta</math>T cells</b>			
$\gamma\delta$ TCRa among CD3+	$99 \pm 107$	$36 \pm 27$	3.37e-03
CD4-CD8- among $\gamma\delta$ TCR+	$83 \pm 97$	$24 \pm 19$	1.45e-03
EM (CD45RA-CCR7-) among CD4-CD8-	$44 \pm 68$	$10 \pm 11$	6.56e-03
CM (CD45RA-CCR7+) among CD4-CD8-	$3.3 \pm 4.5$	$1.5 \pm 1.1$	0.0839
TEMRA (CD45RA+CCR7-) among CD4-CD8-	$33 \pm 45$	$11 \pm 15$	1.03e-03
Naive (CD45RA+CCR7+) among CD4-CD8-	$3 \pm 2.1$	$1.1 \pm 1.1$	2.74e-05
Ki67+ among CD4-CD8-	$1.3 \pm 1.4$	$0.49 \pm 0.42$	8.27e-03
CD4-CD8+ among $\gamma\delta$ TCR+	$4.8 \pm 8$	$4.1 \pm 5.9$	0.627
EM (CD45RA-CCR7-) among CD4-CD8+	$1.4 \pm 4$	$0.85 \pm 1.7$	0.461
CM (CD45RA-CCR7+) among CD4-CD8+	$0.2 \pm 0.22$	$0.15 \pm 0.12$	0.985
TEMRA (CD45RA+CCR7-) among CD4-CD8+	$2.2 \pm 3.6$	$2.7 \pm 4.4$	1
Naive (CD45RA+CCR7+) among CD4-CD8+	$1 \pm 1.5$	$0.41 \pm 0.7$	1.29e-02

Ki67+ among CD4-CD8+	$0.15 \pm 0.17$	$0.18 \pm 0.27$	0.907
CD4+CD8- among $\gamma\delta$ TCR+	$11 \pm 8.8$	$6.8 \pm 6.8$	4.15e-02
EM (CD45RA-CCR7-) among CD4+CD8-	$1.7 \pm 1.6$	$0.91 \pm 0.63$	0.0522
CM (CD45RA-CCR7+) among CD4+CD8-	$4.8 \pm 3.6$	$3.2 \pm 3.5$	0.0546
TEMRA (CD45RA+CCR7-) among CD4+CD8-	$0.25 \pm 0.29$	$0.31 \pm 0.27$	0.193
Naive (CD45RA+CCR7+) among CD4+CD8-	$4.2 \pm 3.9$	$2.4 \pm 2.8$	1.6e-02
Ki67+ among CD4+CD8-	$0.46 \pm 0.33$	$0.26 \pm 0.33$	1.29e-02
CD4+CD8+ among $\gamma\delta$ TCR+	$0.14 \pm 0.34$	$0.057 \pm 0.099$	0.415
EM (CD45RA-CCR7-) among CD4+CD8+	$0.031 \pm 0.11$	$0.015 \pm 0.043$	0.574
CM (CD45RA-CCR7+) among CD4+CD8+	$0.053 \pm 0.19$	$0.014 \pm 0.034$	0.252
TEMRA (CD45RA+CCR7-) among CD4+CD8+	$0.0075 \pm 0.013$	$0.0081 \pm 0.014$	0.859
Naive (CD45RA+CCR7+) among CD4+CD8+	$0.05 \pm 0.067$	$0.02 \pm 0.026$	0.196
Ki67+ among CD4+CD8+	$0.022 \pm 0.083$	$0.005 \pm 0.0071$	0.434
EM (CD45RA-CCR7-) among $\gamma\delta$ TCR+	$49 \pm 69$	$13 \pm 13$	4.05e-03
CM (CD45RA-CCR7+) among $\gamma\delta$ TCR+	$8.5 \pm 7.4$	$5 \pm 4$	0.068
TEMRA (CD45RA+CCR7-) among $\gamma\delta$ TCR+	$33 \pm 44$	$14 \pm 16$	6.18e-03
Naive (CD45RA+CCR7+) among $\gamma\delta$ TCR+	$7.9 \pm 6$	$3.8 \pm 4.3$	5.09e-04
Ki67+ among $\gamma\delta$ TCR+	$2 \pm 1.9$	$1 \pm 1$	2.55e-02